



No. 908	AUTHOR: Steven E. Backs, Wildlife Research Biologist	Date 2/11/06
	TITLE: COMPARISONS BETWEEN HALF-DAY AND ALL-DAY SPRING TURKEY HUNTING IN INDIANA.	

Work Plan: # 204290 *Federal Aid Study/Job No.: W-26-R-36; Job 16-G-5*

Synopsis: Discussions of shooting hours (half verses all-day turkey hunting) for spring wild turkey hunting (*Meleagris gallopavo*) often evoke numerous opinions and perceptions among hunters, outdoor writers, and natural resource agency personnel. Currently, wildlife managers are also now reassessing the proportion of adult gobblers taken during spring hunting seasons, sustainability of subsequent harvests, and it's impact on hunt quality. The objective of this study was to assess whether the lengthening of spring shooting-hours from "half-day" (half-hour before sunrise to noon) to "all-day" (half-hour before sunrise to sunset) influenced the distribution of the harvest throughout the season or the age-specific harvest on adult gobblers in Indiana. Daily and hourly harvest distributions of adult gobblers were compared between 4 years of half-day hunting (1996...1999; 23,356 harvest events) and 2 years of all-day hunting in Indiana (2003 and 2004; 21,061 harvest events).

The extension of shooting-hours did not influence the daily harvest distribution through the 19-day spring season, i.e., the distributions of the total harvest across the season were the same for both half-day and all-day seasons (Fig. 1). When examined on a weekly basis, there was a 3 % shift in the harvest from the 3rd week to the first 2 weeks of the all-day seasons in response to the extended shooting-hour opportunity (Fig. 2). The proportions of the daily harvests that were adults were slightly greater (+2.34%) during all-day hunting (Fig. 3). During all-day seasons, 70% of the total harvest occurred before 1000 hr, 79.5% by noon, 8.0% between 1200-1600 hr, with 12.5% after 1600 hr (Fig 4). Adults made up a slightly greater proportion (> 2% points on average; e.g., 75% verses 77%) of the harvest for the all-day seasons (Fig. 5).

Explanations for differences in the proportion of adults between shooting hour treatments include a greater number of adult gobblers available to hunters during the all-day hunting seasons and unmeasured variables of hunter selectivity. These explanations are supported by conclusions of research in other states that season length, turkey population density, and hunter selectivity influenced the age structure of the harvest. Our data suggest the influence of all-day hunting on adult gobbler mortality is relatively minor on a statewide basis with a 1-bird bag limit. The small differences in the proportion of the harvest that was adults may be related to higher relative turkey population levels and hunter selectivity rather than shooting hours. Currently, the implementation of all-day hunting provides additional and new hunting opportunities without noticeable impacts on the statewide harvest structure and estimated hunter success. Differential adult mortality may be of greater management concern under more liberal spring harvest strategies.

The complete results of this study were presented at the 9th National Wild Turkey Symposium held in December (2005) and will published in the symposium proceedings expected in early 2006.

Citation: Backs, Steven E. 2005. Comparisons between half-day and all-day spring turkey hunting in Indiana. Pages (*in press*) in C. Al Stewart, editor. Proceedings of the Ninth National Wild Turkey Symposium, Michigan Department of Natural Resources, Lansing, MI.

These management and research notes are issued periodically to provide a quick source of information on wildlife surveys and investigations, and various wildlife programs prior to more formal reports. Any information provided is subject to further analysis and therefore is not for publication without permission.

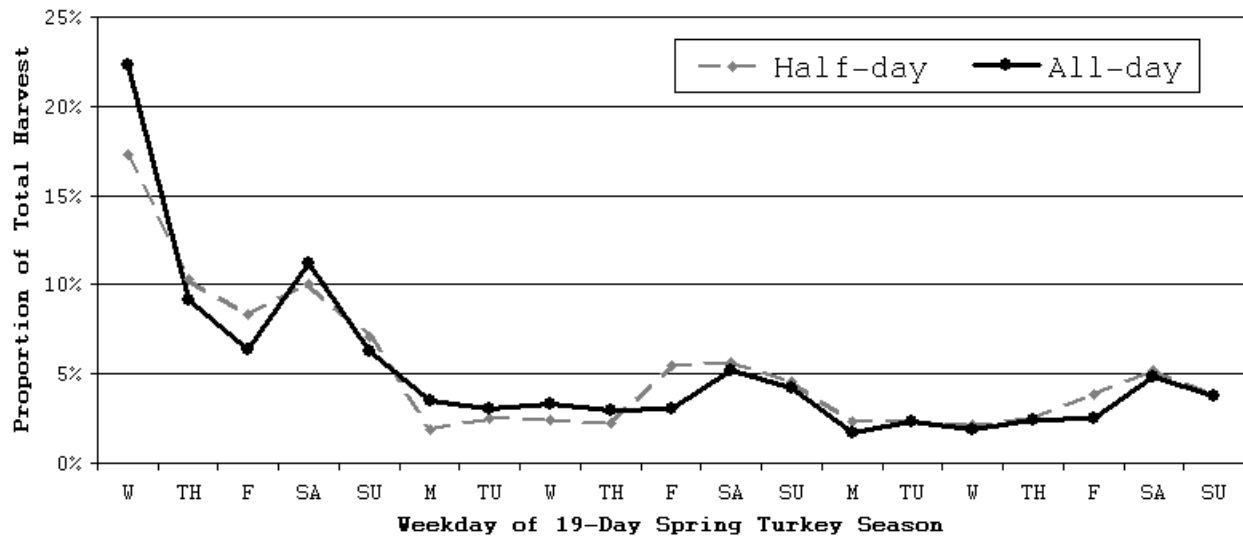


Fig. 1. Distribution of Indiana's spring wild turkey harvest by day of season for half and all-day hunting.

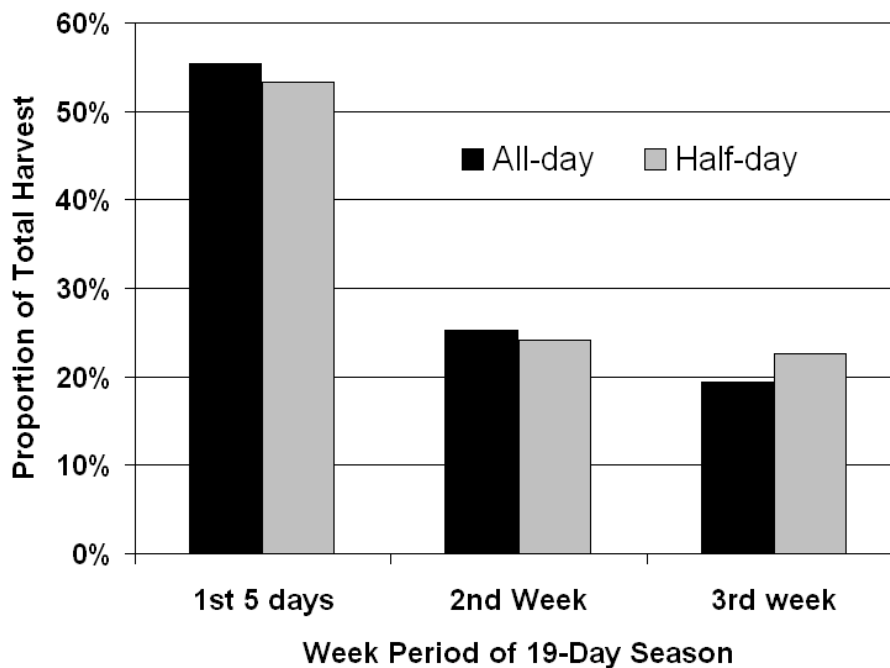


Fig. 2. Proportion of Indiana's spring harvest by weekly periods for half and all-day hunting in Indiana.

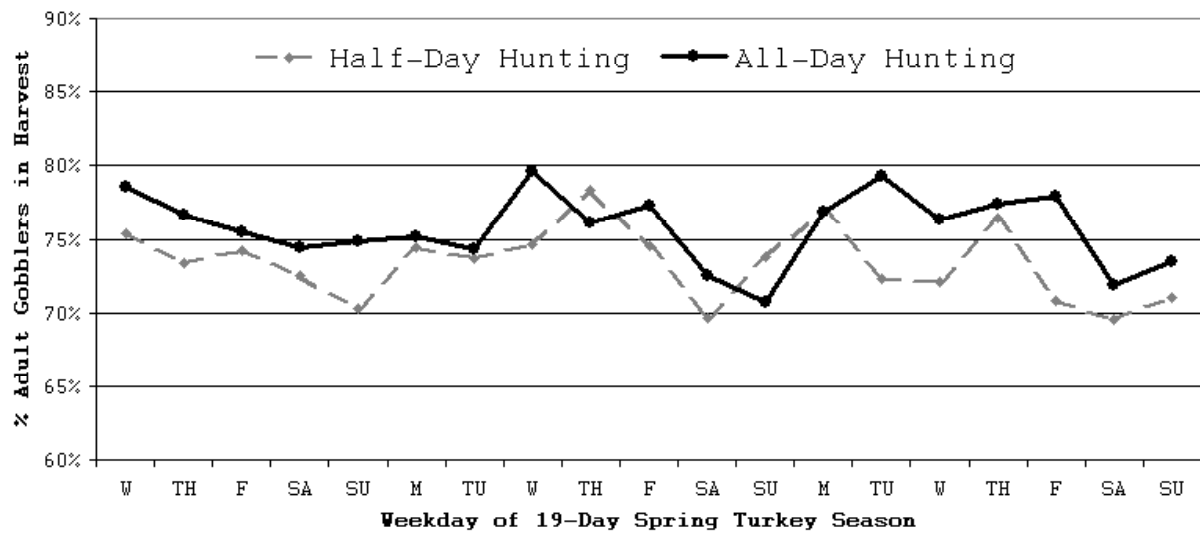


Fig. 3. Proportion of adult gobblers in the harvest by day of the spring season for half and all-day hunting in Indiana.

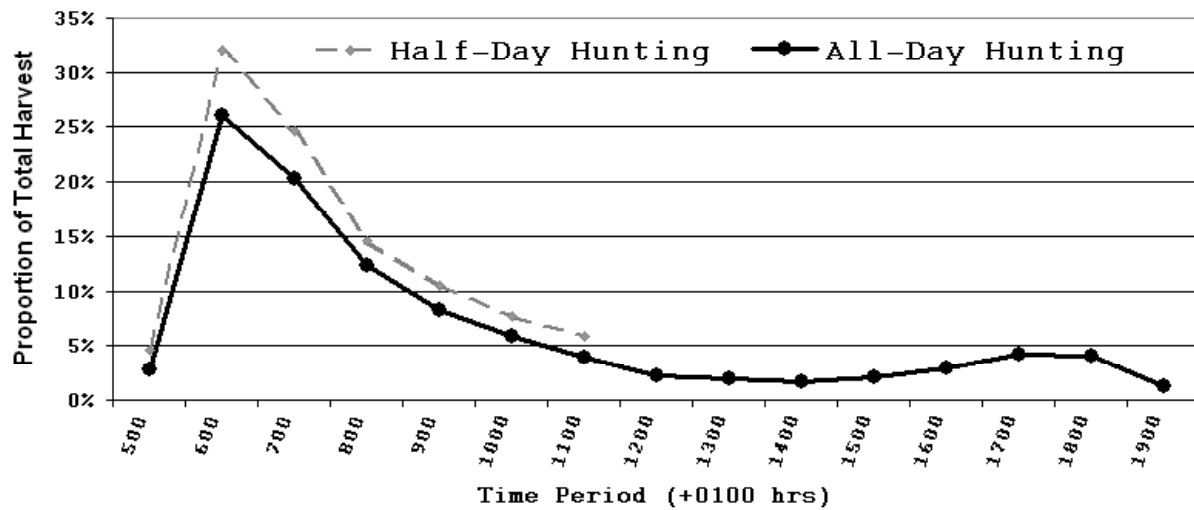


Fig. 4. Hourly distribution of the spring wild turkey harvest for half and all-day hunting in Indiana.

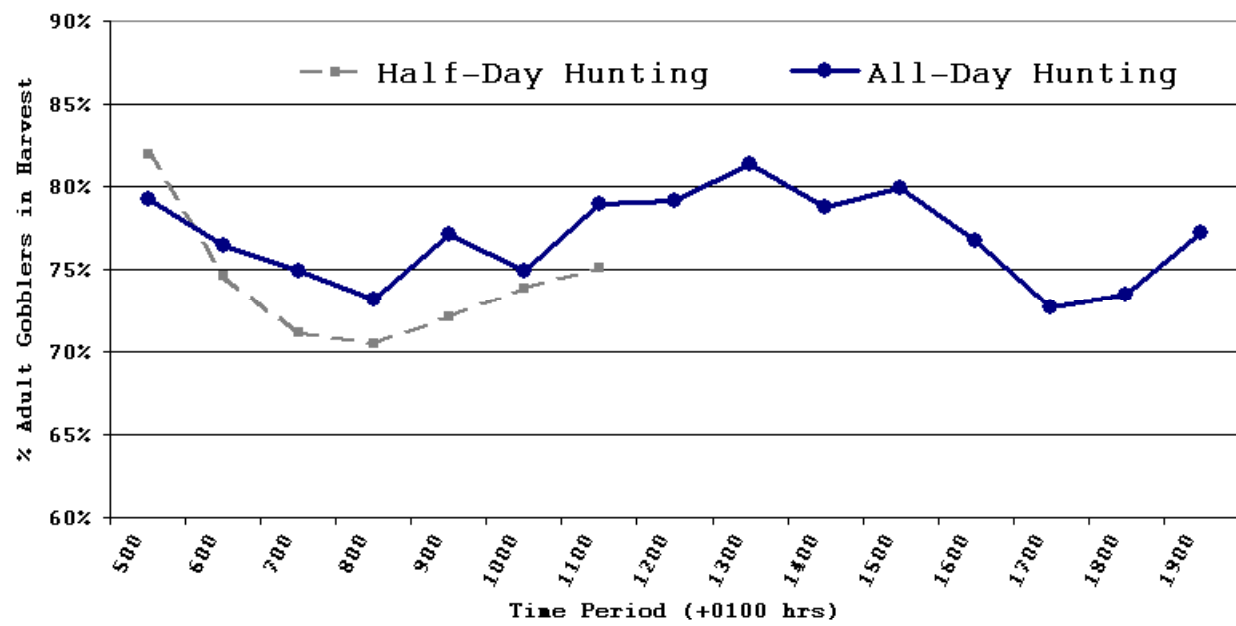


Fig. 5. Proportion of adult gobblers in the spring harvest by time period for half and all-day hunting in Indiana.